Grade 7
AIIC1: Use variables to describe numerical expressions and relationships.
Key: D (580 – m)

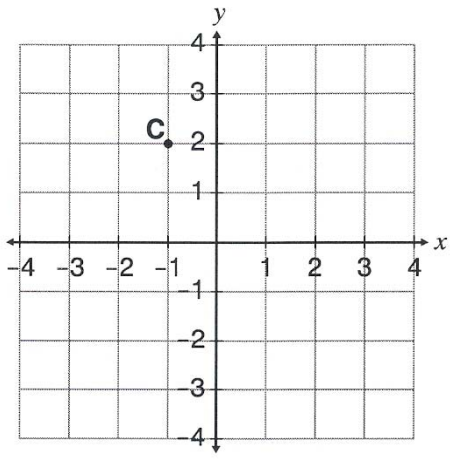
The Nelson family is going on a 580-mile trip. If *m* is the number of miles that they have already traveled, which expression represents how many more miles they have left to travel?

- ◯ $580 + m$
- ◯ $580m$
- ◯ $m - 580$
- ◯ $580 - m$

Choice analysis:

A. Associates "more" with addition
B. Relates any problem with distance to D = R × T, so chooses multiplication
C. Recognizes subtraction but reverses order.
D. key

Grade 7
GIIA1: Identify and graph ordered pairs in the four quadrants of a coordinate plane.
GIIIA1: Describe the transformation used to move a polygon in one quadrant to another quadrant in the coordinate plane
Key: B (-1, -2)



When point C is reflected over the x-axis, what are the coordinates of the reflected point?

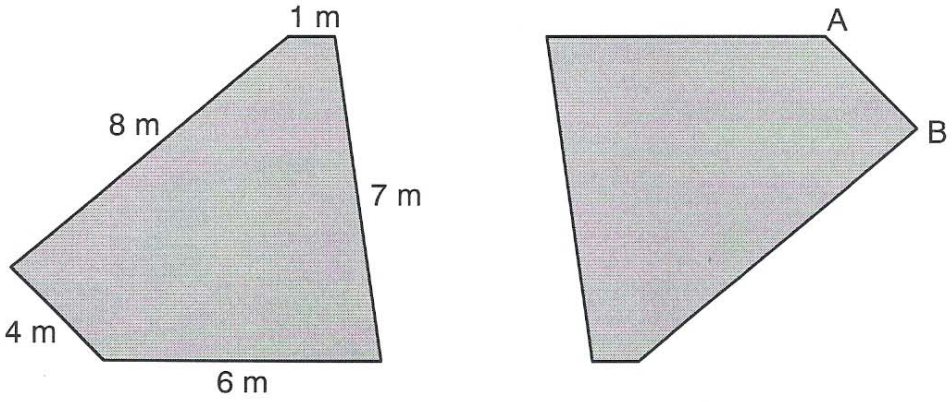
- (−1, 2)
- (−1, −2)
- (1, −2)
- (1, 2)

Choice analysis:

A. Finds location of C
B. key
C. rotates 180 degrees
D. reflects over y-axis

Grade 7
GIC1: Compare and contrast attributes of similar figures and the attributes of congruent figures
Key: D (4 m)

The pentagons shown below are congruent.



What is the length of $\overline{AB}$?

- 8 m
- 7 m
- 6 m
- 4 m

Choice analysis:

A. Compares AB to wrong side
B. Compares AB to wrong side
C. Compares AB to wrong side
D. key

Grade 7
NIA1: Write and use the appropriate equivalent forms of whole numbers, fractions, decimals, and percents.
NID1: Create and write ratios and proportions from applied situations and explain the reasoning used.
Key: A ($^{56}/_{70}$)

Kevin's math teacher allows students to drop their lowest test score. Kevin's test scores are shown below.

Test A:	$\frac{56}{70}$
Test B:	42 out of 50
Test C:	82%
Test D:	83:100

Which test score should Kevin drop?

- ◯ Test A
- ◯ Test B
- ◯ Test C
- ◯ Test D

Choice analysis:

A. key
B. sees 42 as lowest option
C. sees 82 as lower than 84 (B), and 83 (D), does not convert 56/70 (A)
D. looks for highest numbers